Listing of Claims:

Please cancel claim 4.

1. (Currently Amended) A method of inducing an epitope-specific cytotoxic T lymphocyte immune response against a viral infection associated with a viral polyepitope in a human comprising the steps of:

(a) delivering into cells of the human a polynucleotide vaccine, the vaccine comprising both (1) a polynucleotide sequence encoding a viral polyepitope and a major histocompatibility complex class I-restricted peptide epitope and (2) a polynucleotide sequence encoding a hepatitis B core antigen and the ~~a~~ major histocompatibility complex class I-restricted peptide epitope, the sequences operably connected to a promoter functional in at least a portion of recipient cells, in an amount sufficient to induce in the human a cytotoxic T lymphocyte response specific for the major histocompatibiltiy complex class I-restricted peptide epitope, wherein the peptide epitope is derived from the same type of virus as the polyepitope and wherein the peptide epitope is a human immunodeficiency virus epitope; and

(b) following step (a), delivering a live virus vector comprising a polynucleotide coding sequence encoding a viral polyepitope and the major histocompatibility complex class I-restricted peptide epitope of step (a) operably connected to a promoter functional in at least a portion of recipient cells, in an amount sufficient to boost the specific cytotoxic T lymphocyte response to the major histocompatibiltiy complex class I-restricted peptide epitope, induced by the polynucleotide vaccine of step (a) wherein in the response invokes $CD3^+/CD8\alpha^+$T lymphocytes and wherein at least 8.3% of $CD3^+/CD8\alpha^+$T lymphocytes are specific for the epitope.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The method of claim 1, wherein the viral epitope comprises a portion of the amino acid sequence of a polypeptide selected from the group consisting of human immunodeficiency virus gag, pol, nef, tat, rev, and env.

6. (Original) The method of claim 1, wherein step (a) is repeated at least once prior to step (b).

7. (Original) The method of claim 1, wherein step (b) is repeated at least once.

8. (Original) The method of claim 1, wherein the epitope-specific cytotoxic T lymphocyte response is detectable by tetramer staining of fresh, unstimulated polymorphonuclear blood cells.

9. (Original) The method of claim 1, wherein the epitope-specific cytotoxic T lymphocyte response of step (b) is increased relative to the response induced by step (a).

10. (Previously Presented) The method of claim 1, wherein, subsequent to step (b), the human is exposed to a virus comprising the viral epitope, and wherein the human becomes infected with the virus, thus producing a viral load in the human and wherein the human's viral load is lower than the viral load of a comparable naïve human similarly exposed to a virus bearing the viral epitope.

11. (Original) The method of claim 1, wherein the vaccine of step (a) is delivered directly into the primate cells by particle bombardment.

12. (Original) The method of claim 1, wherein the vaccine of step (a) is delivered into the primate by means of injection.

13. (Original) The method of claim 1, wherein after step (b), fresh polymorphonuclear blood cells from the primate produce gamma interferon following exposure to the major histocompatibility complex class I-restricted viral peptide of step (a).

14. (Cancelled)